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JENKINS, WILSON&TAYLOR

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## JENKINS, WILSON & TAYLOR, P.A.

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DATE: November 27, 2006

TO: USPTO

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FROM: Arles A. Taylor, Jr. (lsp)

RE: Serial No. 09/757,054; Our Ref. No. 297/93/2

NUMBER OF PAGES TO FOLLOW: 6

If transmission is poor, or if you do not receive all pages, please  
call (919) 493-8000 as soon as possible.

COMMENTS: Attached please find an Amended Appeal Brief for the above-referenced U.S.  
patent application. Thank you.

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**JENKINS  
WILSON  
TAYLOR  
& HUNT**

patent attorneys

November 27, 2006

I hereby certify that this paper is being facsimile transmitted to the  
United States Patent and Trademark Office on the date shown below.Lynda Pixley  
Date of Signature November 27, 2006

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450Re: U.S. Patent Application Serial No. 09/757,054 for  
METHOD OF PRODUCING AN UNDIFFERENTIATED  
AVIAN CELL CULTURE USING AVIAN PRIMORDIAL  
GERM CELLS  
Our Ref. No. 297/93/2

Sir:

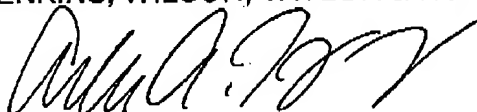
Please find attached in connection with the subject U.S. patent application the  
following documents:

1. A Response to Notification of Non-Compliant Appeal Brief and an  
Amended Appeal Brief (5 pages).

The Commissioner is hereby authorized to charge any fees associated with  
the filing of this correspondence to Deposit Account Number **50-0426**.

Respectfully submitted,

JENKINS, WILSON, TAYLOR &amp; HUNT, P.A.

Arles A. Taylor, Jr.  
Registration No. 39,395AAT/PPP/ljp  
Attachment  
Customer No: 25297

**RECEIVED  
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Serial No.: 09/757,054

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**In re Patent Application of: *Petitte et al.*

Appln. No.: 09/757,054

Filed: January 8, 2001

For: **Method of Producing an  
Undifferentiated Avian Cell Culture  
Using Avian Primordial Germ Cells**

Group Art Unit: 1632

Examiner: Michael C. Wilson

Attorney Docket: 297/93/2

**Amended Appeal Brief to the Board of Patent Appeals  
And Interferences under 37 C.F.R. § 41.37 – Amended Section V**Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to a Notification of Non-Compliant Appeal Brief dated November 15, 2006 and having a one (1)-month term for response that expires on December 15, 2006, please replace pages 2-4 of the Appeal Brief filed October 27, 2006 in the appeal of the above referenced U.S. patent application with replacement pages 2-4 attached to this paper.

While it is believed that no fee is due for the filing of this paper, the Commissioner is hereby authorized to charge any deficiencies of payment associated with this filing to Deposit Account No. 50-0426.

Serial No.: 09/757,054

REMARKS

A Notification of Non-Compliant Appeal Brief dated November 15, 2006 has been presented by the Patent Office. According to the Notification of Non-Compliant Appeal Brief, SECTION V of the Appeal Brief filed on October 27, 2006 does not map independent claim 44 to the specification by page and line number.

M.P.E.P. § 1205.03(B) states:

When the Office holds the brief to be defective solely due to appellant's failure to provide a summary of the claimed subject matter as required by 37 CFR 41.37(c)(1)(v), an entire new brief need not, and should not, be filed. Rather, a paper providing a summary of the claimed subject matter as required by 37 CFR 41.37(c)(1)(v) will suffice.

M.P.E.P. § 1205.03(B).

Accordingly, appellants hereby provide a new SECTION V that includes reference to the specification by page number and line for each element of claim 44. The Patent Office is respectfully requested to replace the SECTION V found on pages 2-4 of the Appeal Brief as originally filed, with replacement pages 2-4 filed herewith. Appellants respectfully submit that the only alterations of pages 2-4 as originally presented in the Appeal Brief and pages 2-4 submitted herewith is the addition of the citations to the specification in SECTION V and the removal of certain blank spaces between the recitations of the dependent claims necessitated by the additional citations to harmonize the page numbering between the original pages 2-4 and pages 2-4 submitted herewith.

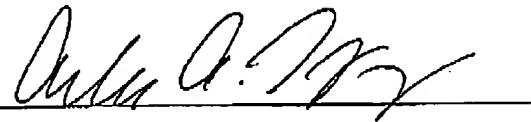
Respectfully submitted,

JENKINS, WILSON, TAYLOR & HUNT, P.A.

Date:

11/27/2006

By:



Arles A. Taylor, Jr.  
Registration No. 39,395

297/93/2

AAT/CPPIjp

Customer No. 25297

Serial No.: 09/757,054

the decision by the Board of Patent Appeals and Interferences (hereinafter "the Board") in the pending appeal.

**III. Status of the Claims – 37 C.F.R. § 41.37(c)(1)(iii)**

Claims 44, 47, 48, 51-54, and 56-58 are pending in the subject application. Claims 44, 47, 48, 51-54, and 56-58 stand finally rejected as per the Final Official Action of December 30, 2005, and are the subject of this Appeal.

**IV. Status of the Amendments – 37 C.F.R. § 41.37(c)(1)(iv)**

A Final Official Action (hereinafter the "Final Official Action") was mailed by the United States Patent and Trademark Office (hereinafter "the Patent Office") on December 30, 2005. No After Final Amendments have been submitted by Appellants.

Additionally, a Declaration Pursuant to 37 C.F.R. § 1.132 by co-inventor Dr. James N. Petitte (hereinafter "the Petitte Declaration") was submitted on October 6, 2005. Although the Final Official Action did not address the Petitte Declaration, Appellants presume that the Petitte Declaration was entered into the record.

**V. Summary of the Claimed Subject Matter – 37 C.F.R. § 41.37(c)(1)(v)**

This summary is presented in compliance with the requirements of 37 C.F.R. § 41.37(c)(1)(v), mandating a "concise explanation of the subject matter defined in each of the independent claims involved in the appeal". Nothing stated within this summary is to be interpreted as changing the specific language of the claims, nor is the language of this summary intended to be construed so as to limit the scope of the claims in any way.

There is one independent claim pending in the application, claim 44. Claim 44 is directed to a sustained culture of undifferentiated chicken cells expressing an embryonic stem cell phenotype. The sustained culture comprises (a) a preconditioned feeder matrix (see the instant specification at page 11, line 11, through page 12, line 9); (b) conditioned media (see the instant specification at page 13, lines 9-20); (c) chicken primordial germ cells and chicken stromal cells (see the instant specification at page 4,

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lines 18-20 ("avian" encompasses "chicken"); and at page 8, lines 9-14 (avian gonadal cells are co-isolated with avian stromal cells); and (d) undifferentiated chicken cells expressing an embryonic stem cell phenotype (see the instant specification at page 1, lines 5-8). The chicken primordial germ cells and stromal cells are isolated together from the embryonic genital ridge or gonad from a chicken embryo at a stage later than stage 14 according to the Hamburger & Hamilton staging system (see the instant specification at page 8, lines 9-14 (avian gonadal cells are co-isolated with avian stromal cells); at page 11, lines 2-5 (collection from genital ridge or gonad); and page 4, lines 3-6 (isolation from an embryo that is later than stage 14 according to the Hamburger & Hamilton staging system). The undifferentiated chicken cells (i) are derived from the chicken primordial germ cells isolated from the chicken embryo (see the instant specification at page 9, lines 18-22); (ii) are smaller than the chicken primordial germ cells (see the instant specification at page 21, lines 9-11); and (iii) form one or more colonies of tightly packed undifferentiated chicken cells expressing an embryonic stem cell phenotype (see the instant specification at page 21, lines 9-11).

Appellants are also separately arguing that certain of the dependent claims include elements that provide additional evidence of compliance of the same with the requirements of 35 U.S.C. § 112 and/or that provide an independent basis for distinguishing the claims from the cited references.

- a) Claim 47: The preconditioned feeder matrix comprises cells that have been isolated from the gonad of a chicken embryo later than stage 14 according to the Hamburger & Hamilton staging system. Support in the specification can be found at page 11, lines 13-15.
- b) Claim 48: The preconditioned feeder matrix comprises cells that have been isolated from the genital ridge of a chicken embryo later than state 14 according to the Hamburger & Hamilton staging system. Support in the specification can be found at page 11, lines 2-15.

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- c) Claim 51: The conditioned media is Buffalo Rat Liver (BRL) conditioned media. Support in the specification can be found at page 13, lines 10-15.
- d) Claim 53: The embryonic stem cell phenotype is maintained for at least one month. Support in the specification can be found at page 14, lines 4-7.
- e) Claim 54: The embryonic stem cell phenotype is maintained for at least two months. Support in the specification can be found at page 14, lines 4-7.
- f) Claim 56: The preconditioned feeder matrix comprises mouse fibroblast cells. Support in the specification can be found at page 4, lines 15-17.
- g) Claim 57: The mouse fibroblast cells comprise STO cells. Support in the specification can be found at page 4, lines 15-17.
- h) Claim 58: The undifferentiated chicken cells maintain the embryonic stem cell phenotype when grown on the preconditioned fibroblast feeder matrix in the presence of the conditioned media for at least three days. Support in the specification can be found in Figure 4 and original claim 15.

**VI. Grounds of Rejection to be Reviewed on Appeal – 37 C.F.R. § 41.37(c)(1)(vi)**

The grounds of rejection for review are as follows:

- A. Claims 44, 47, 48, 51-54, and 56-58 are subject to a new matter rejection under 35 U.S.C. § 112, first paragraph, upon the contention that the specification as filed did not contemplate maintaining the ES cell phenotype for one or two months.
- B. Claims 44, 47, 48, 51-54, and 56-58 have been rejected under the enablement provision of 35 U.S.C. § 112, first paragraph.